

Chem 134 W20

Rec. Ex. 7

Name: _____

Lab sec: _____

Due beginning of recitation March 10 or 11. Answers and work must be shown on **these sheets** which are stapled together (or double-sided).

Refer to the Ch. 6A lecture slides or the textbook to answer the following questions.

1. **Energy** is defined as the *capacity to do* _____. **Work** is a _____ acting on a _____ system. The SI unit of energy is the joule. $1 \text{ J} =$ _____

3. **Thermal energy** is a form of (*potential, kinetic*) _____ energy. It is the energy associated with the random motion of particles.

4. **Potential energy** is _____ energy... it has potential to do _____

5. Briefly explain **chemical potential energy**.

6. Systems with high potential energy:

7. A piece of warm metal is dropped into a beaker of cold water. Briefly explain the process that occurs. Write the equation in the diagram.



8. a) How does the energy unit calorie compare to the joule? A calorie is more than (insert a number) _____ joules.